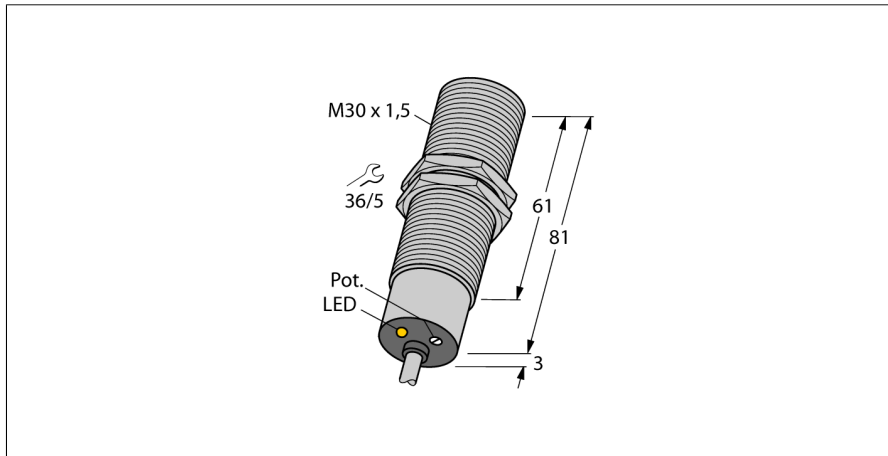


Capacitive sensor BC10-M30-RZ3X

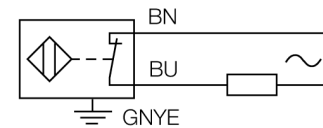
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- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NC contact
- Cable connection

Wiring diagram



Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Type code	BC10-M30-RZ3X
Ident no.	23098
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Assured sensing range	≤ (0.72 x S _n) mm
Hysteresis	2...20 %
Temperature drift	type ≤ ± 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50...≤ 60 Hz
Smallest operating current I _m	≤ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Rated insulation voltage	≤ 1.5 kV
Output function	2-wire, NC contact, 2-wire
Voltage drop at I _n	≤ 7 V
Design	threaded barrel, M30 x 1.5
Dimensions	84 mm
Housing material	metal, CuZn, chrome-plated
Material active face	Plastic, PA
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	25 Nm
Connection	cable
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section	3 x 0.5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

Capacitive sensor BC10-M30-RZ3X

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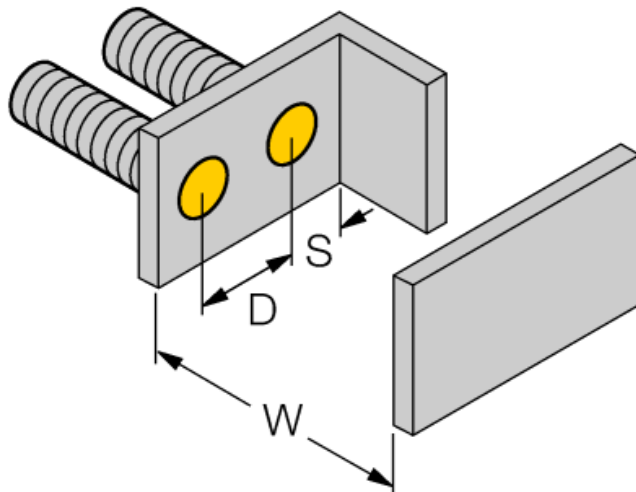
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Mounting instructions / Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

Diameter of the active area B \varnothing 30 mm



The given minimum distances have been checked in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

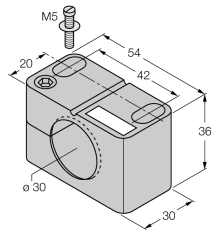
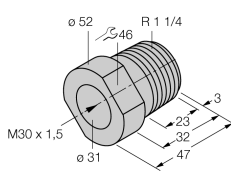


**Capacitive sensor
BC10-M30-RZ3X**

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Accessories

Type code	Ident no.	Description	Dimension drawing
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	 <p>Technical drawing of a rectangular fixing clamp. Dimensions: length 54, width 36, and a circular hole with diameter $\phi 30$. A hole on the top surface has a diameter of 20. A screw with diameter M5 is shown above the clamp. A distance of 42 is marked from the left edge to the center of the top hole. A distance of 30 is marked from the right edge to the center of the top hole.</p>
MAP-M30	6950013	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	 <p>Technical drawing of a cylindrical mounting adapter. Dimensions: outer diameter $\phi 52$, inner diameter $\phi 31$, and a length of 47. The thread is M30 x 1.5. A chamfered edge has a radius of R 1 1/4 and a diameter of $\phi 46$. A distance of 23 is marked from the left end to the start of the thread. A distance of 32 is marked from the left end to the end of the thread. A distance of 3 is marked from the right end to the end of the thread.</p>